

FACT SHEET FOR NPDES PERMIT WA-003201-8 SNOQUALMIE RIDGE II

This fact sheet is a companion document to National Pollutant Discharge Elimination System (NPDES) Permit No. WA-003201-8. This permit is issued to the Quadrant Corporation to allow the discharge of stormwater and uncontaminated dewatering water associated with construction activity from the Snoqualmie Ridge II construction project to tributaries of D Creek, Lake Creek, and Snoqualmie River. This fact sheet establishes the basis for requirements which are included in the permit.

GENERAL INFORMATION

Applicant:	The Quadrant Corporation 35131 SE Douglas Street, #112 Snoqualmie, Washington 98065
Site Name and Address:	Lake Alice Plateau Snoqualmie, WA 98065 King County
Type of Facility:	Construction Activity
Receiving Water:	(i) North High Flow Bypass to Snoqualmie River (ii) D Creek tributary to Coal Creek, tributary to Kimball Creek, tributary to Snoqualmie River (iii) Creek 4, tributary to D Creek (iv) Creek 6, tributary to D Creek (v) Creek 7, tributary to D Creek (vi) Creek 10, tributary to Lake Creek, tributary to Raging River, tributary to Snoqualmie River
Water Body ID Number:	(i) 07-0219 (ii) 07-0457 (iii) 07-0457* (iv) 07-0457* (v) 07-0457* (vi) 07-0393*

* Water bodies without a designated ID number are assigned the number of the water body it is tributary to.

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INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System (NPDES) system of permits, which is administered by the Environmental Protection Agency (EPA). EPA has delegated responsibility to administer the NPDES permit program to the State of Washington on the basis of Chapter 90.48 RCW, which defines the Department of Ecology's authority and obligations in administering the Wastewater Discharge Permit Program.

Regulations adopted by the state include procedures for issuing permits (Chapter 173-220 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the state is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the permit. One of the requirements (WAC 173-220-060) for issuing a permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty (30) days before the permit is issued (WAC 173-220-050). The fact sheet and draft permit are available for review. Details on the public notice procedures are contained in Appendix A of the fact sheet. Definitions for both the permit and fact sheet are contained in Appendix B of the fact sheet.

The draft permit and fact sheet were reviewed by the Permittee. Errors and omissions identified in this review were corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. Comments, responses, and the resultant changes to the permit and fact sheet will be summarized in Appendix C. Parties that submit comments will receive a copy of the final permit and fact sheet.

BACKGROUND

DESCRIPTION OF THE PROJECT

The Snoqualmie Ridge II project site encompasses approximately 736 acres located on the Lake Alice Plateau in unincorporated King County, immediately west of the existing Snoqualmie Ridge community. It is located within portions of Sections 23, 26, 27 and 35, Township 24 North, Range 7 East W.M. and Section 2, Township 23 North, Range 7 East W.M. The site is comprised of three non-contiguous parcels lying north, west and south of Snoqualmie Ridge. The south site area consists of approximately 526 acres located immediately southwest of the existing Snoqualmie Ridge development; the north site area consists of approximately 194 acres located immediately northwest of Snoqualmie Ridge; and the northeast site area (also known as the Lineweaver property) consists of approximately 16 acres located immediately northeast of Snoqualmie Ridge. The Lake Alice Plateau is bounded to the north and east by the Snoqualmie River valley, to the south by Interstate 90, and to the west by the Raging River valley. The Snoqualmie Parkway passes through the south site area. The Parkway becomes SR-18 at I-90, approximately ¼ mile south of the south site area boundary.

Current land uses at the project site include forestry and recreation. Limited aggregate mining activities (excavation of borrow material) have occurred in the past.

The Snoqualmie Ridge II project will be a predominately urban density single and multi-family community. Minor neighborhood retail, a church associated with a park and ride lot, neighborhood parks, and a school on land owned by the Snoqualmie School District may be included. There is substantial open space for protection of sensitive wetlands and drainage ways. There are approximately 48.77 acres of wetlands in the South Area, 2.03 acres of wetlands in the North Area, and no wetlands in the Northeast Area. No streams would be relocated. Stream crossings are planned by spans or bottomless culverts.

Snoqualmie Ridge II is a multi-phased project planned to be developed over approximately 7 to 10 years. As phases are developed, the stormwater controls will be installed to serve that phase of construction and future phases if the drainage subbasins are crossed.

In 2004, planned construction includes:

- Construction of the main access road and infrastructure into the North Area, which may extend only through Parcel N4 (see SWPP Figure 2) or through to Parcel N1;
- Final Plat improvements to Parcel N4, such that individual building sites are readied for foundations by the end of the 2004 construction season; and
- Build out of Parcel N5, including some or all home site construction, in conjunction with Parcel K-North construction in the original Snoqualmie Ridge project, through which Parcel N5 in Snoqualmie Ridge II is accessed.

DESCRIPTION OF THE RECEIVING WATER

The Snoqualmie Ridge II site falls within three major drainage basins: the Raging River, Coal Creek, and Snoqualmie River drainage basins. The Raging River and Coal Creek drainage basins ultimately discharge to the Snoqualmie River. Thirteen subbasins, 14 streams, and 63 wetlands were identified on the three areas of SR II. In addition, two off-site drainage channels (identified as B and R drainage channels) have their headwaters in on-site wetlands. Stream and wetland features are described briefly in the following sections.

Eastern portions of the South Area drain to D Creek, tributary to Coal Creek and Kimball Creek, which discharges to the Snoqualmie River upstream of Snoqualmie Falls. Nearly all of this area is overlain by till. Construction drainage will be treated and discharged to D Creek. Portions of Basin R, located in the southeast corner of the South Area have shallow infiltrative soils over bedrock. Construction drainage from Basin R could be dispersed and infiltrated after treatment.

Western and southern portions of the South Area drain to the south towards Lake Creek (surface and subsurface flow), west towards Our Lake and its outlet Icy Creek (via wetlands and then subsurface flow), and west through wetlands to the outlet of Lake Alice. Lake Creek, Icy Creek,

and the outlet of Lake Alice are tributaries to the Raging River, which joins the Snoqualmie River downstream of Snoqualmie Falls. All of this area is overlain by till. Construction drainage in Basin C, the Lake Alice Basin, will be diverted out of that basin into Basin D, to be discharged after treatment into D Creek. This is proposed to avoid construction discharge influence to an off-site wetland bog located at the Lake Alice outlet. Construction drainage from the remaining areas will be treated and dispersed or discharged to natural or existing basin locations.

The North Area drains to I Creek and J Creek, which are tributaries to the Snoqualmie River downstream of Snoqualmie Falls. Construction drainage from this area will be managed by infiltration in I Basin. A permanent infiltration facility is planned in Basin I in a location with favorable soils. Provision will be made to use the infiltration location for treated construction discharge, and then clean and finish the facility for permanent use. There is an existing North High Flow Bypass Pipeline to the Snoqualmie River serving Snoqualmie Ridge with capacity to serve a portion of the I Creek and J Creek basin drainage. A permanent connection line to the high flow bypass will be extended from Snoqualmie Ridge II to collect treated discharge during and after construction.

The Northeast Area infiltrates at present. The soils are suitable for dispersion and infiltration after treatment during construction. Alternatively, a temporary tightline could be constructed to convey treated construction discharge to M Creek, tributary to the Snoqualmie River downstream of Snoqualmie Falls. Dispersed treatment and infiltration is planned for the Northeast Area after construction.

The Snoqualmie River and its tributaries are designated as Class A receiving waters. Potential characteristic uses of Class A waters include the following:

water supply (domestic, industrial, agricultural); stock watering; fish migration; fish and shellfish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation.

DESCRIPTION OF DISCHARGE

Stormwater runoff from Snoqualmie Ridge II discharges or will discharge at 6 identified locations (Outfalls A–F). Outfall A discharges via an existing bypass to the Snoqualmie River. Outfall B discharges to D Creek. Outfalls C, D, and E discharge to D Creek tributaries. D Creek discharges to Coal Creek. Coal Creek discharges to Kimball Creek, which joins the Snoqualmie River upstream of Snoqualmie Falls at R.M. 41.1. Outfall F discharges from Creek 10, which is tributary to Lake Creek. Lake Creek discharges to the Raging River, which joins the Snoqualmie River downstream of Snoqualmie Falls at R.M. 36.2. Except for the off-site bypass line outfall (Outfall A), stormwater from the project is routed to existing on-site native wetlands and creeks through various treatment ponds. Stormwater ponds provide treatment and flow control prior to discharge to wetlands and creeks. On-site wetlands and creeks receiving the discharges are considered to be waters of the state and the Permittee is required to meet water quality standards in them. Snoqualmie Ridge II basins without surface discharge will infiltrate stormwater during the construction phase (Basins A, B, I, M, R). Construction stormwater from Basin C will be diverted to Basin D to prevent potential impacts to the LA-3 bog.

Outfall A discharges runoff from Basin I via the North High Flow Bypass to the Snoqualmie River (WRIA 07-0219) at RM 38 downstream of Snoqualmie Falls.

Outfall B discharges to D Creek (WRIA 07-0457), which is tributary to Coal Creek (WRIA 07-0456). Coal Creek discharges to Kimball Creek (WRIA 07-0454) which joins the Snoqualmie River at RM 41.1. Outfall C discharges to Creek 4, which is tributary to D Creek. Outfall D discharges to Creek 6, which is tributary to D Creek. Outfall E discharges to Creek 7, which is tributary to D Creek.

Outfall F discharges runoff from F basin to Creek 10, which is tributary to Lake Creek (WRIA 07-0393). Lake Creek discharges to the Raging River (WRIA 07-0384), which joins the Snoqualmie River (at RM 36.2).

PROPOSED PERMIT LIMITATIONS

Federal and state regulations require that effluent limitations set forth in an NPDES permit must be either technology- or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3, and Chapter 173-220 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC), Sediment Quality Standards (Chapter 173-204 WAC) or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

The presumptive approach clearly fails for the large construction source category such as Snoqualmie Ridge II. Past monitoring at the first phase of Snoqualmie Ridge and other large construction projects demonstrates a reasonable potential to violate the 5 over background state turbidity standard.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Discharges of stormwater must meet all applicable provisions of Sections 301 and 402 of the Clean Water Act (CWA). These provisions require control of pollutant discharges to a level equivalent to Best Available Technology Economically Achievable (BAT) for toxic and unconventional pollutants, and Best Conventional Pollutant Control Technology (BCT) for conventional pollutants, and any more stringent limitations necessary to meet water quality standards. In addition, state law requires discharges to apply all known available and reasonable methods of prevention and treatment (AKART) to prevent and control the pollution of the waters of the state of Washington. State law also requires any other more stringent limitations necessary to meet all applicable state standards.

The sand and gravel industry is engaged in significant land disturbing activities, such as earth movement, excavation, mining, and washing and sorting of aggregate. In 1994, a new Sand and Gravel General Permit was developed by Ecology in which a discharge limit of 50 NTU for turbidity was established. Over the last nine years this similar source category has demonstrated the 50 NTU limit to be achievable.

In 2002, Ecology reissued the Industrial Stormwater General Permit which required monitoring and established benchmark values for a variety of conventional parameters including turbidity. The benchmark value is not an effluent limitation but is intended to be a target indicator of whether source control and treatment measures at a facility are operating properly. The benchmark for turbidity in the Industrial Stormwater General Permit is 25 NTUs.

In 1998, Ecology first issued an Individual Construction Stormwater Permit which was based on the general permit but also required discharge monitoring. A review of available data from eight individual construction stormwater permitted facilities showed that less than 10 percent of the discharge data failed to meet 50 NTU end of pipe. Therefore, a technology-based effluent limitation for turbidity of 50 NTU is being established for this permit. Ecology will establish the points of compliance with water quality-based limits for turbidity from the monitoring plan submitted by Quadrant for the project site. These points of compliance will take into consideration the temporary turbidity mixing zones as set forth in WAC 173-201A-110(3).

The permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) which includes Best Management Practices (BMPs) to prevent the pollution of stormwater and to reduce the amount of pollutants discharged. Development of an adequate SWPPP and full implementation of BMPs constitutes implementation of BAT, BCT, and AKART.

The Permittee is required to use the Department of Ecology's August 2001 Stormwater Management Manual for Western Washington (SWMM), or an equivalent manual, to make a judgment of which BMPs are necessary to achieve compliance with the BAT and BCT requirements of the CWA, as well as the AKART requirements of state law. The SWPPP must include a description of stabilization and structural practices to be used at the site to minimize erosion and the movement of sediments on and from the site. The SWPPP will be submitted to the Department for review.

The discharge of process wastewater, domestic wastewater, or noncontact cooling water to a storm drain is prohibited. Illicit discharges are not authorized, including spills of oil or hazardous substances, and obligations under state and federal laws and regulations pertaining to those discharges apply.

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington's surface waters, WAC 173-201A-060 states that waste discharge permits shall be conditioned such as the discharge will meet established surface water quality standards. The Washington State Surface Water Quality Standards (Chapter 173-201A WAC) is a state regulation designed to protect the beneficial uses of the surface waters of the state. Surface water quality-based effluent limitations may be based on an individual waste load allocation (WLA) or on a WLA developed during a basin wide total maximum daily loading study (TMDL).

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

"Numerical" water quality criteria are numerical values set forth in the State of Washington's Water Quality Standards for Surface Waters (Chapter 173-201A WAC). They specify the levels of pollutants allowed in a receiving water while remaining protective of aquatic life. Numerical criteria

set forth in the water quality standards are used along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limitations, they must be used in a permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. EPA has promulgated 91 numeric water quality criteria for the protection of human health that are applicable to Washington State (EPA 1992). These criteria are designed to protect humans from cancer and other diseases and are primarily applicable to fish and shellfish consumption and drinking water from surface waters.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit toxic, radioactive, or deleterious material concentrations below those which have the potential to adversely affect characteristic waters uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the state of Washington.

ANTIDEGRADATION

The State of Washington's Antidegradation Policy requires that discharges into a receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of a receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall be protected. More information on the State Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

When the construction site is not in compliance with these standards, the Permittee shall take immediate action(s) to achieve compliance by implementing additional BMPs and/or improved maintenance of existing BMPs.

MIXING ZONES

The water quality standards allow the Department of Ecology to authorize mixing zones around a point of discharge in establishing surface water quality-based effluent limits. Both "acute" and "chronic" mixing zones may be authorized for pollutants that can have a toxic effect on the aquatic environment near the point of discharge. The concentration of pollutants at the boundary of these mixing zones may not exceed the numerical criteria for that type of zone. Mixing zones can only be authorized for discharges that are receiving all known available and reasonable methods of prevention, control and treatment (AKART) and in accordance with other mixing zone requirements of WAC 173-201A-100. The National Toxics Rule (EPA, 1992) allows the chronic mixing zone to be used to meet human health criteria.

A mixing zone has not been specified nor established in the permit.

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, U.S. EPA has promulgated human health criteria for toxic pollutants (EPA, 1992). Pollutants that might be expected in the discharge from construction activity are: turbidity, pH, and petroleum products. The water quality standards for turbidity and pH for Class A waters are:

Turbidity: shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

Electro coagulation is a known, available and reasonable method of turbidity treatment that achieves the state turbidity standards reliably and consistently. This has been demonstrated at the Microsoft project in Redmond during the wet season. A pool of technical experts is available for treatment, such as rain-for-rent, as well as seasoned staff for compliance point determination.

Water Techtonics has demonstrated a reduction of turbidity in construction stormwater from 2000 NTU to less than 5 NTU with Chitosan, a crab shell extract, treatment.

Similarly, Natural Site Solutions is also using Chitosan. The table shows the results of four separate Chitosan treatment tests in which the water tested was treated with Chitosan.

Test	Turbidity		pH		Acquatic Toxicity Tests	
	Before	After	Before	After	Trout	Daphnia
1	79	2.7	7.0	7.0	0% mortality	0% mortality
2	150	1	6.9	6.9	0% mortality	0% mortality
3	365	2	7.1	7.1	0% mortality	2% mortality
4	643	3.1	7.1	7.1	0% mortality	0% mortality

The table above shows the results of four separate Chitosan treatment tests in which the water tested was treated with Chitosan.

Aquatic toxicity testing performed by Parametric Laboratories, Bellevue.

Rain for Rent achieved a discharge turbidity of 2.8 NTU treating construction stormwater turbidity ranging up to 600 NTU.

Clearwater Compliance has achieved similar results using Chitosan treatment of turbid construction stormwater.

pH: shall be within the range of 6.5 to 8.5 (freshwater) or 7.0 to 8.5 (marine water) with a human-caused variation within a range of less than 0.5 units.

Although there is no specific water quality standard for petroleum products, the hazardous waste rules under RCW 90.56 have been interpreted under RCW 90.48 to disallow visible sheen.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the BMPs are functioning correctly and that the water quality criteria are not being violated in the receiving water.

Recent monitoring requirements require 0.25-inch rain event sampling of construction stormwater discharges.

- A. The monitoring order for the Des Moines Creek Basin Restoration Project Phase 1 project requires monitoring of 0.25-inch rain events for construction stormwater and dewatering water.
- B. The draft permit for the Brightwater Wastewater Treatment Plant construction project requires 0.25-inch rain event sampling.
- C. The draft permit for the Brightwater Conveyance System construction project requires 0.25-inch rain event sampling.
- D. The Industrial Stormwater General permit issued in August 2002, established monitoring requirements that set a storm event trigger of “greater than 0.1 inches in a 24-hour period.”
- E. The Washington State Department of Transportation has recognized the limitations of only monitoring 0.5-inch storm events and now more commonly uses 0.25 in their monitoring plans. The 0.5-inch rain event trigger that has been used over the past 4 or 5 years has proven to be inadequate to determine water quality compliance for short duration/high intensity storm events.

These permits and Snoqualmie Ridge II require 0.25-inch event sampling because a continuous series of short term rain events spanning several days have a reasonable potential to violate water quality standards for turbidity. Erosion potential and discharge of pollutants from construction sites are more closely correlated to rainfall intensity than the amount of rain in a 24-hour period. Light rain throughout a 24-hour period does not generate the pollution potential of a short duration high intensity storm event.

Based on rain data from the Western Region Climate Center for Snoqualmie Falls, the 0.25 rain event trigger adds at most 37 rain events to be sampled for a total of 77 for the year. This is if all the events must be sampled. However, it is not likely that all these rain events will need to be sampled. The permit limits sampling to a maximum of three events per calendar week. This was in response to Quadrant’s comment that they preferred “an average of about two monitorings per week during the wet season.” The limit of three events for the wet season and even less sampling during the dry season satisfies Quadrant’s request of about two sampling events per week. This may allow violations to go undetected during periods when sampling is not occurring but the Department finds this to be a reasonable compromise.

A storm event monitoring trigger of 0.25 inches will allow for better compliance determinations and help ensure protection of the turbidity criteria and therefore the Snoqualmie Ridge II permit establishes a monitoring trigger for all storm events greater than or equal to 0.25 inches in a 24-hour period.

The Department will establish the point of compliance in the receiving water through the review and approval of the Construction Stormwater/Dewatering Monitoring Plan required in Special Condition S3.A. The downstream point of compliance

(a) For waters up to 10 cfs flow at the time of construction, the point of compliance shall be one hundred feet downstream from activity causing the turbidity exceedance.

(b) For waters above 10 cfs up to 100 cfs flow at the time of construction, the point of compliance shall be two hundred feet downstream of activity causing the turbidity exceedance.

(c) For waters above 100 cfs flow at the time of construction, the point of compliance shall be three hundred feet downstream of activity causing the turbidity exceedance.

(d) For projects working within or along lakes, ponds, wetlands, estuaries, marine waters or other nonflowing waters, the point of compliance shall be at a radius of one hundred fifty feet from activity causing the turbidity exceedance.

The permit requires an independent qualified construction pollution control officer to advise on the Stormwater Pollution Prevention Plan including the monitoring plan. The permit also requires the stormwater plan and monitoring plan to be stamped by a professional engineer. This plan must be submitted for approval by March 1, 2005, and as revised thereafter. Generally the process of monitoring plan review is during a field inspection to observe the sampling locations.

The Department has successfully established points of compliance at Redmond Ridge UPD and Skagit Highlands that are similar projects to Snoqualmie Ridge II. Also, five companion orders to the Stormwater Construction General permit and the Sand and Gravel General Permit successfully established points of compliance with the 5 NTU over background standard. Monitoring upstream of the influence of the discharge and downstream after mixing is a reasonable and necessary requirement to ensure compliance with the five NTU over background state standard for turbidity and in no case to exceed 300 feet.

The Department is well experienced with finding points of compliance with the state turbidity standard. For example, there have been cases where the head waters for state waters begin at the discharge from a construction site. The Department and the discharger in these cases agreed a nearby stream can represent background turbidity. If upon an inspection of the sampling points a revision to the monitoring plan is required, then it must be submitted to the Department 30 days before implementing the revision. The 30-day submission is also required in the event the Permittee wants to modify the monitoring plan.

For some stormwater discharges, the discharge may not be directly to a receiving waterbody (stream, etc); rather, the discharge is conveyed to the receiving water through a roadside ditch or other type of engineered structure. When implementing the water quality monitoring requirements, or when determining dilution factors, these structures will not be considered "receiving waters" or a "point of compliance" for assessing compliance with the water quality standards. Instead the surface waterbody (stream, etc.) that the ditch or structure drains to will be characterized to determine flow (calculate dilution factors), and assess compliance with the water quality based effluent limits established in this permit.

The receiving water is the waterbody at the point of discharge. If the discharge is to a stormwater conveyance system, either surface or subsurface, the receiving water is the waterbody that the stormwater conveyance system discharges to. Systems designed primarily for other purposes

such as for groundwater drainage or for conveyance of irrigation water/return flows that coincidentally convey stormwater are considered the receiving waters and not stormwater conveyance systems.

The Permittee is required to submit a Construction Stormwater/Dewatering Monitoring Plan for approval by March 1, 2005, with annual updates as needed for revisions. The purpose of the monitoring plan is to assess compliance with the water quality standards in each water body that will receive stormwater discharge during the following year.

LAB ACCREDITATION

Laboratories used to prepare monitoring data shall be registered or accredited under the provisions of *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Turbidity and pH may be measured in the field with properly calibrated meters.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S4 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-220-210).

STORMWATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION ACTIVITIES

Special Condition S6 requires a SWPPP for construction activity, including construction dewatering, to be prepared and implemented prior to the commencement of construction activity. The objectives of a SWPPP for construction activities are: 1) Implement BMPs to minimize erosion and sediments from rainfall runoff at construction sites, and to identify, reduce, eliminate, or prevent the pollution of stormwater; 2) Prevent violations of surface water quality, ground water quality, or sediment management standards; 3) Prevent, during the construction phase, adverse water quality impacts including impacts on beneficial uses of receiving water by controlling peak rates and volumes of stormwater at the Permittee's outfalls and downstream of outfalls; and 4) Eliminate the discharges of unpermitted process wastewater, domestic wastewater, illicit discharges, and noncontact cooling water to stormwater drainage systems and waters of the state.

A Spill Prevention and Emergency Cleanup Plan shall be included as a section in the SWPPP. BMP S1.80 in Volume IV of Ecology's *Stormwater Management Manual (SWMM)* shall be used for guidance in developing this plan.

GENERAL CONDITIONS

General Conditions are based directly on state and federal law and regulations.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the

Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G6 and G7 relate to permit renewal and transfer. Condition G8 prohibits the reintroduction of removed substances back into the effluent. Condition G9 states that the Department will modify or revoke and reissue the permit to conform to more stringent toxic effluent standards or prohibitions. Condition G10 incorporates by reference all other requirements of 40 CFR 122.41 and 122.42. Condition G11 notifies the Permittee that additional monitoring requirements may be established by the Department. Condition G12 requires the payment of permit fees. Condition G13 describes the penalties for violating permit conditions. Condition G14 states that the permit does not convey any property rights or any exclusive privilege. Condition G15 requires compliance with all conditions of this permit. Condition G16 requires compliance with effluent standards for toxic pollutants. G17 provides under the Clean Water Act that any person who falsifies, tampers with or knowingly renders inaccurate any monitoring device is subject to penalties and/or imprisonment. Condition G18 requires the Permittee to give prior notice to the Department of planned changes to facility production or processes. Condition G19 establishes the requirement to provide advance notification to the Department of anticipated noncompliance. Condition G20 requires the submittal of any relevant facts determined to have been omitted in original permit application. Condition G21 establishes compliance schedule reporting.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary, to meet water quality standards for surface waters, sediment quality standards, or water quality standards for ground waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended state or federal regulations.

Points of compliance with the water quality standard for turbidity will be developed in coordination between Ecology field staff and field representatives of Weyerhaeuser. As discussed earlier, the process of developing the final Monitoring Plan for submission to Ecology involves a great deal of information exchange between Ecology and the Permittee. The final approval or denial of submittals required by the permit, such as the Monitoring Plan, may be appealed by the Permittee.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the state of Washington. The Department proposes that this proposed permit be issued for five (5) years to coincide with the Cedar/Green Water Quality Management Area permit issuance cycle.

REFERENCES FOR TEXT AND APPENDICES

Environmental Protection Agency (EPA)

- 1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.
- 1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-001.
- 1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water. EPA/600/6-85/002a.
- 1983. Water Quality Standards Handbook. USEPA Office of Water, Washington, D.C.

Washington State Department of Ecology.

- 1994. Permit Writer's Manual. Publication Number 92-109.

Snoqualmie Ridge II Draft Environmental Impact Statement Volume I, June 2003
Stormwater Pollution Prevention Plan (SWPPP) Draft, November 7, 2003

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to issue a permit to Quadrant Corporation for Snoqualmie Ridge II. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public Notice of Application (PNOA) was published on December 24, 2003, and December 31, 2003, in the *Snoqualmie Valley Record* to inform the public that an application had been submitted and to invite comment on the issuance of this permit.

The Department published a Public Notice of Draft (PNOD) on April 6, 2004, in the *King County Journal* to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments were mailed to:

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30)-day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-220-090). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (425) 649-7276, or by writing to the address listed above.

This permit and fact sheet were written by Bob Wright.

APPENDIX B—DEFINITIONS

Best Management Practices (BMPs - general definition) means schedules of activities; prohibitions of practices; maintenance procedures; and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks; sludge or waste disposal; or drainage from raw material storage. In this permit, BMPs are further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

Bypass means the diversion of waste streams from any portion of a treatment facility.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

Constructed Wetland means wetlands intentionally created, on sites that are not natural wetlands, for the primary purpose of wastewater or stormwater treatment and managed as such. Constructed wetlands are normally considered as part of the stormwater collection and treatment system.

Construction Activity means clearing, grading, excavation, and any other activity which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Construction Dewatering means the act of pumping ground water or stormwater away from an active construction site.

Detention means the temporary storage of stormwater to improve quality and/or to reduce the mass flow rate of discharge.

Director means the Director of the Washington State Department of Ecology or his/her authorized representative.

Discharger means an owner or operator of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present.

Ecology means the Washington State Department of Ecology.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to surface water or to ground water than BMPs selected from the SWMM.

Equivalent Stormwater Management Manual means a manual that has been deemed by Ecology as being equivalent to the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and sediment traps and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

Erosion and Sediment Control Plan means a document which describes the potential for erosion and sedimentation problems, and explains and illustrates the measures which are to be taken to control those problems.

Final Stabilization means the completion of all soil disturbing activities at the site and the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions or geotextiles) which will prevent erosion.

"40 CFR" means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

Ground Water means water in a saturated zone or stratum beneath the land surface or a surface water body.

Illicit discharge means any discharge that is not composed entirely of stormwater except discharges pursuant to an NPDES permit and discharges resulting from fire fighting activities.

Leachate means water or other liquid that has percolated through raw material, product or waste and contains substances in solution or suspension as a result of the contact with these materials.

Local Government means any county, city, or town having its own government for local affairs.

Municipality means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure and container from which pollutants are or may be discharged to surface waters of the state. This term does not include return flows from irrigated agriculture. (See Fact Sheet for further explanation.)

Pollutant means the discharge of any of the following to waters of the state: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of Section 312 of the FWPCA, nor does it include dredged or fill material discharged in accordance with a permit issued under Section 404 of the FWPCA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the state; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Puget Sound Basin means the Puget Sound south of Admiralty Inlet (including Hood Canal and Saratoga Passage); the waters north to the Canadian border, including portions of the Strait of Georgia; the Strait of Juan de Fuca south of the Canadian border; and all the lands draining into these waters as mapped in Water Resources Inventory Areas numbers 1 through 19, set forth in WAC 173-500-040.

Sanitary Sewer means a sewer which is designed to convey domestic wastewater.

Sediment means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

Sedimentation means the depositing or formation of sediment.

SEPA (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Significant Amount means an amount of a pollutant in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a pollutant that has a reasonable potential to cause a violation of surface or ground water quality or sediment management standards.

Significant Contributor of Pollutant(s) means a facility determined by Ecology to be a contributor of a significant amount(s) of a pollutant(s) to waters of the state of Washington.

Significant Materials include, but are not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

Site means the land or water area where any "facility or activity" is physically located or conducted.

Source Control BMPs means physical, structural, or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

Stabilization means the application of appropriate BMPs to prevent the erosion of soils, such as temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

Storm Sewer means a sewer that is designed to carry stormwater. Also called a storm drain.

Stormwater means rainfall and snow melt runoff.

Stormwater Drainage System means constructed and natural features which function together as a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate, or divert stormwater.

Stormwater Management Manual for the Puget Sound Basin (SWMM) or Manual means the technical manual prepared by Ecology for use by local governments and published in 1992, or statewide revisions when they become available, that contain descriptions of and design criteria for BMPs to prevent, control, or treat pollutants in stormwater.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.

Surface Waters of the State include lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Treatment BMPs means BMPs that are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

USEPA means the United States Environmental Protection Agency.

Water Quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in Chapter 90.48 RCW which include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Acronyms

BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response Compensation & Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
FWPCA	Federal Water Pollution Control Act
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SWMM	Stormwater Management Manual for the Puget Sound Basin
SWPPP	Stormwater Pollution Prevention Plan
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality

APPENDIX C—RESPONSE TO COMMENTS

RESPONSIVENESS SUMMARY FOR THE SNOQUALMIE RIDGE II NPDES PERMIT

The Department received comments from Peter G. Lymberis, P.E. of Quadrant Homes.

1. We concur that an individual permit rather than coverage under the current construction general permit is appropriate for the SRII project, mainly to provide a specific means for monitoring and reporting and to ensure that Ecology has an opportunity to review the SWPPP prior to construction.

Response: Comment noted. An individual NPDES permit also establishes effluent limits in conformance with Title 40 Part 122.45 (e) (4) Calculating NPDES permit conditions (applicable to State NPDES programs *Non-continuous discharges* "Discharges which are not continuous discharges shall be particularly described and limited considering prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 mg/l zinc)."

2. The project as a whole encompasses about 450 buildable acres but it will be built over a period of 7-10 years, such that only approximately 60-80 acres will be under development at any one time. Thus, on an annual basis the project is comparable in size to many projects that receive NPDES coverage under the construction general permit. The adaptive management approach to permit compliance for in the construction general permit should also apply here.

Response: The individual permit is for the common plans of development for the entire project. The Department disagrees this project is comparable to many projects that receive NPDES coverage under the construction general permit. The project will last 7 to 10 years, including 7 to 10 rainy seasons; is near substantial open space for protection of sensitive wetlands and drainage ways; will contain stream crossings by spans or bottomless culverts; falls within three major drainage basins: Raging River, Coal Creek and Snoqualmie River; falls within thirteen sub basins, 14 streams, and 63 wetlands. In addition, two off-site drainage channels have their head waters in on-site wetlands. This is not comparable to many projects under the General Construction Stormwater Permit.

3. All known, available and reasonable methods of control prevention and treatment are required by both federal and state statutes. Consequently NPDES stormwater permits emphasize the SWPPP as the tool to identify and implement BMPs which must be expected to achieve compliance with water quality standards. If inspections and monitoring indicate that BMPs are not functioning as expected, or that water quality standards might be violated, then adaptive management measure must be taken immediately. Permit compliance should focus primarily on the means to achieving compliance, i.e. BMPS, not on the establishment of possible violations of water quality standards.

Response: The Department concurs both federal and state statutes require AKART. We also agree the current State general NPDES construction permit for construction activities requires SWPPPs as the principal condition. However, individual construction stormwater permits require both monitoring and effluent limitations to achieve compliance with both AKART and surface water quality standards. For example the individual construction stormwater permit for Skagit Highlands, a large residential housing development, contains almost identical conditions to those in the Snoqualmie Ridge II permit requiring compliance with AKART and surface water quality standards for turbidity, and pH. The individual construction stormwater permit for Redmond Ridge UPD, also a large residential housing development, contains almost identical conditions to those in the Snoqualmie Ridge II permit. Also, see Response one.

4. WAC 173-201A-510(3)(d) requires best management practices required in waste discharge permit, rules, orders, and directives issued by the department for activities which generate storm water pollution.

Response: The regulation referred to is adopted but not approved by EPA. The adopted changes to the 2003 rule cannot be used for federal Clean Water Act actions until the Environmental Protection Agency approves the standards. The estimate time for approval is the summer of 2004. The 1997 standards and criteria should be used as a basis for decision-making until approval is received.

5. WAC 173-201A-510(3)(d) was reinforced by the Legislature this past session.

Response: The legislation only applies to the construction and industrial storm water general permits issued by the department and not to individual permits.

"NEW SECTION. **Sec. 2.** A new section is added to chapter 90.48 RCW
To read as follows:
The provisions of this section apply to the construction and
Industrial storm water general permits issued by the department..."

6. Although the prescriptive elements of ESSB 6415 apply to the NPDES general permit program, the legislative findings and the underlying philosophy to achieve compliance through BMPs and adaptive management apply to all construction projects, whether permitted under an individual permit or the general permit program. This includes an enforceable adaptive management mechanism that includes monitoring to an adaptive management indicator such as monitoring benchmarks, review and revisions to the SWPPP, documentation of remedial actions taken, and reporting. ESSB6415 Sec. 2(8). This provides for a reasonable, fair, and effective permit compliance mechanism for the Snoqualmie Ridge II individual construction stormwater discharge permit. This shifts the focus from discerning possible water quality violations.

Response: The method developed by the Department of Ecology in individual stormwater permits to ensure compliance with both AKART and surface water quality standards is the establishment of enforceable effluent limitations.

EPA stated as far back as November 6, 1996, in the Federal Register "in cases where adequate information exists to develop more specific conditions or limitations to meet water quality standards, these conditions or limitations are to be incorporated into storm water permits as necessary and appropriate." Further, "Since the policy only applies to water quality-based effluent limitations, it is not intended to affect technology-base limitations, such as those based on effluent guidelines or the permit writer's best professional judgment, that are incorporated into storm water permits." Some of the limitations are based on the best professional judgments of the permit writer.

EPA also stated, "In addition, particularly for some industries, adequate information may already have been collected with which to assess the reasonable potential for a stormwater discharge to cause or contribute to an excursion of WQS, and from which a numeric water quality-based effluent limitation can be (or has been) appropriately derived."

This is the case for Snoqualmie Ridge II. Not only has data been collected from construction sites to assess the reasonable potential for stormwater discharges to cause and contribute to an excursion of turbidity and pH standards but there is also data to appropriately derive numeric water quality-based effluent limitations. The first Snoqualmie Ridge project violated the turbidity standards during its construction demonstrating the reasonable potential for its stormwater discharges to violate state standards for turbidity.

In addition, Title 40 Part 122.44 (d) (iii) states "When the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentrations of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant."

The Snoqualmie Ridge II permit complies with this requirement by establishing effluent limitations for turbidity, pH and TPH.

7. Monitoring of receiving water quality can be a complicated process to achieve accurate results for pollutant level and causes. Identifying and accessing appropriate upstream and downstream monitoring locations, existing controls on point and nonpoint sources of pollution, the variability of the pollutant parameter in the stormwater discharge, consideration of dilution in the receiving water, and other potential contributors to water quality excursions all come into play.

Response: Receiving water monitoring and upstream and downstream monitoring have been conducted successfully in NPDES permits. Technical reasons why Snoqualmie Ridge II can not be not provided in the comment. Monitoring upstream of the influence of the discharge and downstream after mixing is a reasonable and necessary requirement to ensure compliance with the five NTU over background state standard for turbidity.

Federal and state law require compliance with the state turbidity and pH standards with existing controls, variability of the pollutant parameter in the discharge, consideration of dilution in the receiving water and other potential contributors to water quality excursions. They have been achieved at similar sites and can be achieved at Snoqualmie Ridge II.

8. The draft permit as written implies that if monitoring indicates an excursion of water quality standards, then a permit violation has occurred. We do not agree that the relationship is that clear or direct.

Response: In either the general or individual stormwater permits, if monitoring reveals a water quality standard exceedance, that is a permit violation. The draft permit requires compliance monitoring of effluent limitations to measure, ensure, and enforce compliance with state water quality standards and AKART.

9. The monitoring and permit compliance efforts should primarily focus on adaptive management of BMPs to ensure that the best possible water quality result are being achieved. This is consistent with the clean water acts, the state regulation, and the new legislation.

Response: The Department is clearly consistent with federal, state and the new legislation in establishing effluent limitations as stated in Responses 1, 4, 5 and 6.

10. The turbidity state standard and mention of compliance should be removed from the permit. Compliance should mean an adequate SWPPP has been prepared and fully implemented, the SWPPP is adequate to prevent the discharge of toxic pollutants, floating materials and erosion and AKART has been taken to prevent the discharge or settleable solids and to reduce turbidity in discharges directly or indirectly to surface waters.

Response: Compliance with state water quality standards is required for all NPDES permits issued by Ecology. Compliance with state health and welfare standards is also the goal and the means to attain that goal in the individual stormwater permits is establishing enforceable effluent limitations.

11. In determining compliance, Ecology should consider weather conditions as related to design storms, available dilution and background conditions and other requirements of Chapters 173-200 WAC, 173-201A WAC AND 173-204 WAC. Benchmark monitoring and adaptive management and notification should apply.

See Response 7.